

Review

Construction of Self-Nonself Circulationy Nursing Theory

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Abstract

The purpose of this study is to construct a new nursing grand theory derived from an oriental philosophy known as “Self-Nonself Circulation Theory”. Self-Nonself Circulation Theory was proposed by Masatoshi Murase in 2000 from a viewpoint of the historical nature of life. The main feature of the present theory is that the principle of Self-Nonself Circulation determines the continuous complexification which is accompanied by the emergence of new levels of organization in the hierarchy, thus resulting in diversity of life, namely, ‘Seimei Mandala’.

Most of the existing nursing theories have been proposed on the basis of general system theory. They are grouped into two categories: 1) Theories treating patients from one side of their behaviors such as adaptation theory, self-care theory and behavioral system theory. 2) Theories treating patients from a holistic standpoint such as unitary human beings theory, human becoming theory and expanding consciousness theory.

Despite such a variety of nursing theories, most of them have been focused only on developing processes, but not on both of developing and disintegrating processes. In this study, we describe how a new nursing theory can be derived from Self-Nonself Circulation Theory. As a result of this, we are able to develop a new nursing grand theory based on a new paradigm of life obtained from an eastern philosophical perspective.

Keywords : theory construction, grand nursing theory, Self-Nonself Circulation Theory, oriental philosophy

1. Introduction

In this paper, we constructed a new nursing theory as a detailed extension of the previous paper by Murase, T. (2006, 2011a, 2011b), in collaboration with Murase, M. (2000) who developed “Self-Nonself Circulation Theory” of life. Some of the extended works were presented elsewhere (Murase, M. and Murase, T., 2013a, b, 2014; Murase, T., 2013; Murase T. and Murase, M., 2014).

A nursing theory is a proposed structure of thinking or philosophy which can explain the mutual relations among nursing phenomena in a unified manner. Nursing theories and their models should serve as knowledge for improving practices, guide researches and nursing curricula. In addition, they should provide nurses with goals for nursing assessment, diagnosis and professional education.

The first nursing theory (or philosophy to be precise) was presented by Florence Nightingale in her book ‘Notes on Nursing: What It Is and What It Is Not’ published in 1859. In her philosophy of nursing practice, putting the patient’s body in such a state that it be free of disease or it recover from disease was of utmost importance in accordance with her belief in

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human bodies' natural healing powers. Since this publication, many nursing theorists from Western countries have presented a variety of nursing theories. These were philosophies (Henderson, 1966; Watson, 1985), grand theories (Orem, 2001; Rogers, 1970; Roy, 1976; Neuman, 1995), middle-range theories (Peplau, 1952; Travelbee, 1971; Parse, 1981; Newman, 1995, 2008) and so on. Especially, grand nursing theories began to emerge as a movement in the 1950's. Today's critics often find them meaningless because of their vagueness in nursing practice (Peterson and Bredow, 2009). However, in the face of rapidly growing knowledge of their discipline, nurses need to understand clearly its theoretical and philosophical base. Therefore it seems worthwhile to reconsider and integrate these nursing theories.

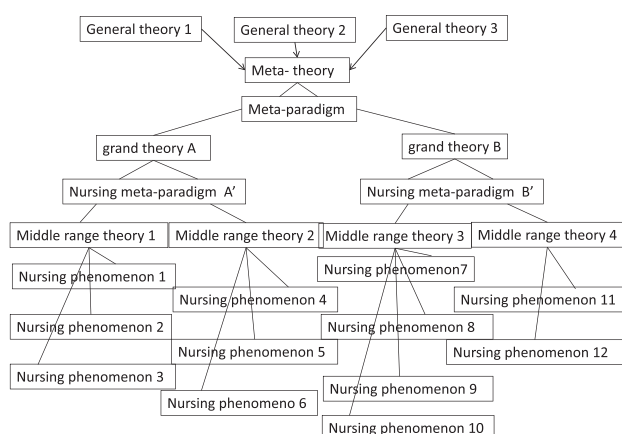


Fig. 1. Structure showing relationships among different kinds of nursing theories. (From Murase, T., 2006)

Figure 1 illustrates the structure showing relationships among different kinds of nursing theories and also explains the structure of the developmental process of cognition in nursing science. This was created on the basis of "Hierarchical Structure of Contemporary Nursing Knowledge: Constituents and level of abstraction" proposed by Fawcett (1993) and the evolutionary theory of knowledge proposed by Riedl (1981). There are two approaches to constructing a nursing theory: the inductive method or the deductive one. In theory construction using the inductive method, middle-range theories (1~4) first

emerge through various nursing phenomena (1~12). Next, nursing meta-paradigms (A', B') are extracted by unifying several middle-range theories. Finally, grand theories (A, B) are developed based on nursing paradigms. In theory construction using the deductive method, various general theories (1-3) first merge into a meta-theory. Then, that meta-theory is brought into nursing science. Finally, grand theories (A, B) are structuralized. General theories in this Figure are theories in those academic fields that Self-Nonself Circulation Theory has its background from, such as historical science, philosophical science and psychological science. Self-Nonself Circulation Theory subsists as the meta-theory of these general theories.

We think that most nursing theories so far have been proposed on the basis of general system theory (Bertalanffy, 1968) following Western ideas (Figure 2). Western thinking is usually based on a simple cause-and-effect relation. To the Western people, it is very natural to think in terms of a time lapse, where the cause precedes the effect. This way of thinking views conflicting results as being mutually exclusive or even contradictory. Eastern thinking on the other hand is based on a comprehensive view rather than a cause-and-effect view. To the Eastern people, it is general to think in a field-like view, allowing for confrontational coexistence. This way of thinking views conflicting results as being complementary rather than oppositional (Gieser, 2005).

Western thinking



Eastern thinking

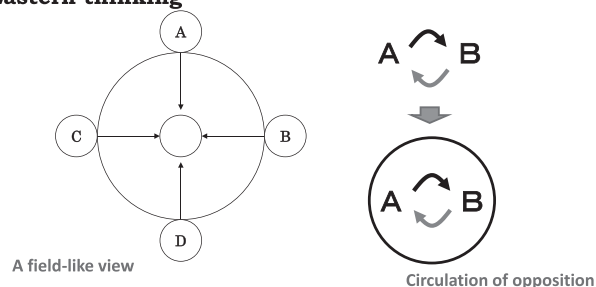


Fig. 2. Western thinking & Eastern thinking (From Murase, M. 2008)

It is well known that there are two kinds of thinking patterns. Thinking in terms of cause and effect (Fig. 2 top) is typically Western, whereas thinking at the same instant is said to be typically Eastern (Fig. 2 bottom). To the Westerner, it is an important question to ask 'what came first, the chicken or the egg', and it is very natural to think in the form of a time lapse, where the cause precedes the effect. Once the current state of affairs is derived from a preceding cause, it is considered that a satisfactory explanation is obtained. In contrast, Eastern thinking is based on a comprehensive or a field-like view rather than a cause-and-effect or an arrow-like view.

Nursing theories based on Western thinking are grouped into two categories (Murase, T. 2006):

1. Theories treating patients from one side of their behaviors such as adaptation theory (Roy, 1984), self-care theory (Orem, 2001) and behavioral system theory (Johnson, 1980),
2. Theories treating patients from a holistic standpoint such as unitary human beings theory (Rogers, 1970), human becoming theory (Parse, 1981) and expanding consciousness theory (Newman, 1994, 2008).

Despite such a variety of nursing theories, most of them have focused only on developing processes, but not on both of developing and disintegrating processes where by developing processes we mean creating/developing biological processes such as ontogeny, development, cognition, and evolution while by disintegrating processes we mean extinguishing/collapsing biological processes such as cancers, aging, death and extinction.

The quintessence of life may be phrased as follows: "There is always a critical contradiction between self-development and self-disintegration since the self and the non-self are opposed to each other from the beginning but keep updating themselves while maintaining their coexistence" (Murase, T., 2011a, 2011b). Human beings as living organisms are no exceptions in this regard. Hence in any human science we need to understand relevant phenomena in terms

of a theory not resting on conventional methodologies of natural science. (See Table 1.)

Table 1. Traditional science & Human science

	Traditional science	Human science
Methods of observation	object (consciousness)	subject & object (consciousness & unconsciousness)
Logical system	consistency	contradiction
Time developing	reproducible	historical
Structure of space	non-nested hierarchy	nested hierarchy

In nursing we monistically consider human beings as living organisms and care them from the aspect of their life regarded as activities of the organisms. In this sense it seems necessary for us to develop a nursing theory based on an appropriate theory of life that not only captures its essence but also takes into account its history.

Figure 3 illustrates how seemingly opposed phenomena are understood from a unified view, just as the slogan. From the viewpoint of dualism, health and disease/illness are considered to be quite different states of life. Thus, the onset of disease/illness and its recovery are usually considered to be different mechanisms. From the viewpoint of monism, on the other hand, health and disease/illness are considered to overlap with each other. The very mechanism that maintains health may also trigger disease/illness when the condition is changed.

From dualism to monism

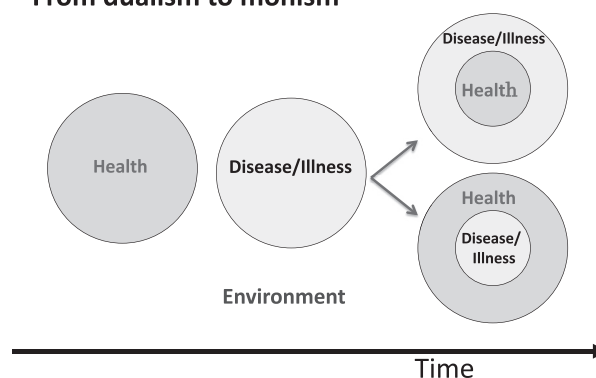


Fig. 3. Health & Disease/Illness

2. The derivation of 'Self-Nonself Circulation Theory'

2.1. Self-Nonself Circulation Theory

Self-Nonself Circulation Theory was originally proposed to account for the highly complex organization of life (Murase, M., 2000, 2008). It was described from a viewpoint of the nested hierarchical nature of life itself including human communications.

Figure. 4 illustrates how a closed endo-system not only shows its identity in contrast with the open environment (or exo-world), but also undergoes an evolution through variation and 'weak selection' in the context of a combination of elements involved. A closed endo-system can keep its identity as it has boundaries which isolate the internal materials from the exo-world. Suppose that such a closed endo-system is subject to formation-deformation cycles as shown in the lower panel – that is, the boundaries are broken, allowing entries of new elements from the exo-world, and resealed. At each cycle, the closed endo-system could not retain the same composition as it was before, but instead evolve in a spiral fashion as shown in the upper panel. This interactive process between the endo-system and the exo-world is referred to as an endo-exo circulation. The paradigm of an endo-exo circulation suggests that, while nature and nurture may be taken together, they may not be considered in isolation. One is tied to the other inseparably within a dynamic circulatory process. This endless circulation between nature (self or endo-) and nurture (non-self or exo-) makes the emergence of new health disorders which is inevitable whenever our environment changes for the worse. Self-Nonself Circulation Theory could probably provide a new basis for developing a nursing theory.

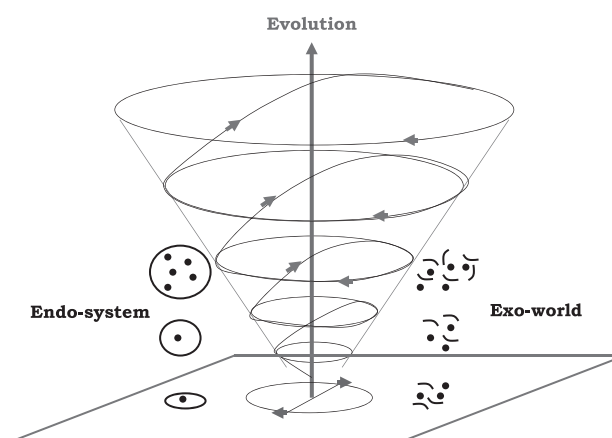


Fig.4. Endo-exo circulation in Self-Nonself Circulation Theory
(From Murase, M., 2000)

One of the motivations behind the construction of Self-Nonself Circulation Theory was the question: Does it make sense to ask the meaning of life phenomena in the same style of thinking as in that of usual natural science? The conventional style of thinking proceeds in the following way. An observer first decomposes a natural phenomenon into several elements, then extracts all the properties of the phenomenon by synthesizing the results obtained from this analysis, and finally attempts to explain the phenomenon itself. There are three implicit assumptions in this process:

1. Reproducibility of the same phenomenon under the same condition.
2. Equality between the quintessence of each part obtained by the analysis and that of the whole.
3. The exo-observation by the observer standing outside of the object of observation.

However, these assumptions do not apply to human phenomena since exactly the same events do not happen twice because any change can accumulate as time proceeds, and it is impossible to understand a human being by decomposing the body into genes and analyzing them. Another reason is that one cannot neglect the endo-observation by the self as in the case of nursing science where the processes of human relationships are the prime targets of research.

The salient features of Self-Nonself Circulation Theory are:

1. Although one cannot distinguish a living being

from dead matter by reduction to “elements”, one has prospects by reduction to “dynamical processes” such as “aggregation and disaggregation”, “synthesis and degradation” and “ring-closing and ring-opening”.

2. One-dimensional linear polymer structure, two-dimensional planer membrane structure, and three-dimensional closed spherical structure circulate with one another under the process of Self-Nonself Circulation.
3. Due to the nested structure generated by the historical nature of life, if each elementary process is that of Self-Nonself Circulation Theory then so is the whole one. Hence each part acquires the aspect of the whole and can develop indefinitely.
4. By grasping a new structure from the viewpoint of either creation or destruction, one can explain developing and disintegrating phenomena from one and the same theory.
5. One can also deal with endo-observations since understanding by observation can be regarded as the self-process of forming a “structure” for the system of closed relationships (“structural” cognitive capability) while searching for its reason.

In this way Self-Nonself Circulation Theory enables us to understand the structural processes of life phenomena, our cognition and products thereof such as knowledge, art, culture and civilization. What accelerate the process of a new structure formation are conflictions within the existing structure. If this new structure succeeds in contributing to the formation of a new level it leads to a creative development. If otherwise, it leads to disjuncture of different parts either at the same level or at different levels, thus resulting in disintegration. This is the point where a paradox exists.

2.2. Analogy (similarities) and difference (dissimilarities) between nursing science and biological philosophy

We construct our nursing theory derived from Self-Nonself Circulation Theory by employing the notion of “theory derivation” due to Walker and Avant. According to them,

Theory derivation is an easy way to develop theory rapidly in a new field because all that is required is (1) the ability to see analogous dimensions of phenomena in two distinct fields of interest and (2) the ability to redefine and transpose the content and/or structure from Field 1 to Field 2 in a manner that adds significant insight about some phenomenon in Field 2. (Walker and Avant, 2008, p.148).

As is clear from this, to derive a new theory we need to extract similarities between phenomena in the two distinct academic fields and redefine/replace the contents/structure of the old theory. So, in this work, after describing in concrete terms similarities and dissimilarities between phenomena in life philosophy and those in nursing science, we explain the nursing development presented by the new theory comparing it with those presented by the existing theories.

The similarities come from the fact that both of the two academic fields deal with life phenomena, human cognition, languages as expressions thereof, behaviors, knowledge, art, culture and civilization (Murase, M., 2001). The dissimilarities come from the fact that life philosophy is concerned with phenomena in various academic fields whereas nursing science is concerned with nursing phenomena such as the cause and law of the patterning of human behavior and nursing care since nursing science views phenomena treated in life philosophy from the standpoint of human health.

The nursing metaparadigm is “the most abstract component of the structural hierarchy of contemporary nursing knowledge” (Fawcett, 1993). In general, a metaparadigm consists of “the extremely abstract concepts that identify the phenomena of central interest to a discipline and the global propositions that state the relations between or among the phenomena” (Kuhn, 1970). In the discipline of nursing the metaparadigm is made up of four abstract concepts that give an account of especially intriguing nursing phenomena (Fawcett, 1993). They are:

1. Human beings,
2. Environment,
3. Health,

4. Nursing.

In addition, there are four global propositions explaining relations between or among nursing phenomena (Donaldson and Crowley, 1978; Gortner, 1980):

1. The discipline of nursing is concerned with the principles and laws that govern the life-process, well-being, and optimum function of human beings, sick or well.
2. The discipline of nursing is concerned with the patterning of human behavior in interaction with the environment in normal life events and critical life situations.
3. The discipline of nursing is concerned with the processes by which positive changes in health

status are effected.

4. The discipline of nursing studies the wholeness or health of humans, recognizing that humans are in continuous interaction with their environments.

The relation between Self-Nonself Circulation Theory as life philosophy and nursing theory is an inclusive one with the former containing the latter. Consequently, there should be similarities in phenomena that interest both theories. Pursuing this analogy we modify the four statements concerning Self-Nonself Circulation Theory as in Table 2 and call the nursing theory we will construct in this work as “Self-Nonself Circulation Nursing Theory”.

Table 2. Modifications of Self-Nonself Circulation Theory

Self-Nonself Circulation Theory (Life Philosophy)	Self-Nonself Circulation Nursing Theory (Nursing Science)
1. Life phenomena can be regarded as “Self-Nonself Circulation”. A Self-Nonself Circulation is a dynamical process in which the self (a closed endo-system) and the nonself (the exo-world) circulate endlessly. It generates a constant development with “aggregation and disaggregation”, “synthesis and degradation”, “ring-closing and ring-opening” and so on being repeated.	1. Nursing phenomena can be regarded as “Self-Nonself Circulation”. A Self-Nonself Circulation in nursing care is a nursing process creating a patient-nurse relationship in which the self (a patient) and the nonself (a nurse) interact, influence one another, change and improve. Namely, as long as the latent survival and living abilities of the patient are not hampered, the nurse in this process performs either a “pro-care” in which the nonself attends the self while agreeing with the cognition of the self or a “con-care” in which the nonself attends the self while disagreeing with the cognition of the self. In other words, the self and the nonself keep circulating in this process with the nonself performing a con-care for the narrow self who is evading relationship with the nonself and a pro-care for the expansive self who is willing to interact with the nonself.
2. If each elementary process is that of Self-Nonself Circulation Theory then so is the whole one with each part acquiring the aspect of the whole, thus leading to the structure of a nested hierarchy. The process repeats itself endlessly by constant structuralization with this structure being retained and organized into a higher hierarchy.	2. A human being is an indecomposable and holistic existence with parts and the whole forming a nested hierarchy. A nurse can understand a patient better by recognizing that even a slight change in his expression and behavior hint the current status of his mind and body. Namely, phenomena observed in a part indicate the status of the whole. Continued interactions with the patient such as natural conversations, physical cares or whatever make him feel comfortable support the whole existence of the self within him leading to the process in which the disintegrating self transforms itself into the reorganizing one.
3. A life process is a historical one with repetitiveness and similarity since no clear boundary exists between the endlessly circulating self and nonself and any circulation is followed by another.	3. At the core of a nursing process is approving the self of the patient who is denying it. Taking into account repetitiveness and similarity of Self-Nonself Circulation, the current experience of the patient might have previously shown up in a different guise. Therefore, by looking back on the life experience in the past one may make sense of the anguish the patient currently has and may predict his future experiences. Put differently, with the expectation that the present suffering from illness can be traced back in the life history of the patient, one may understand the meaning of the current anguish by reconsidering the past life process with a due respect to the experiences therein. By caring the patient during a typical disintegrating process the nurse helps the patient recognize the historical nature of life, find out the currently living self in the disintegrating self, and envision the reorganizing self. This is because similar experiences in the past may well predict the ones in the future. Practically, the nurse helps the patient devise by himself a novel way of life in which the life style leading to illness is revised and the latent survival and living abilities are maximized.

Self-Nonself Circulation Theory (Life Philosophy)	Self-Nonself Circulation Nursing Theory (Nursing Science)
4.A living being does not stop its constant structuring since the “self-developing process” and the “self-disintegrating process” are inextricably linked together in the sense that they compete but coexist. A self-developing process is a process in which a biological order is generated and grows. Examples are the origin of life, ontogeny, cognition and evolution. A self-disintegrating process is a process in which a biological order is disappearing or collapsing. Examples are cancers, aging, death and extinction.	4. Two conflicting life processes in nursing phenomena such as a developing process and a disintegrating process are two sides of the same coin. If both patients and nurses stop responding negatively to disintegrating phenomena such as illness, self-mutilation and death and are willing to attach significance to those phenomena themselves, nurses can help patients find a fresh meaning for their life. If patients can coexist with the transition process from the disintegrating self to the developing self and from the narrow self who is evading relationship with the nonself to the expansive self who is willing to interact with the nonself, nurses can support the constant structural processes in which the patients create their new life by starting from the past self, going through the disintegrating-developing self, and advancing to the future self. A “pro-care” in which the nonself attends the self while agreeing with the cognition of the self and a “con-care” in which the nonself attends the self while disagreeing with the cognition of the self are inextricably linked together in the sense that they compete but coexist.

3. A proposal of a new nursing theory

3.1. Assumptions

The present theory is derived from Self-Nonself Circulation Theory. We assume the following metaparadigm (see Table 3) taking into consideration a variety of existing theories on the understanding of human beings such as those developed by nursing theorists (Travelbee, 1971; Newman, 1994, 2008), psychologists (Jung, 1950, 1968; Piaget, 1950; Rosen, 1993), psychiatrists (Kandabashi, 1990) and philosophers (Nishida, 1987, 2012).

Table 3. The meta-paradigm of new nursing theory

Human beings Co-existence of opposition leading to process of Self-Nonself Circulation from their births as one organism of life.	Environment Internal and external environment from molecules, humans, social, psychological, physical and chemical circumstances to the universe.
Health and Disease/Illness Process of Self-Nonself Circulation without any defect leading to the development of hierarchical structures.	Nursing Find some defect within the process of self-nonself circulation on patients to support their self-caring process from a integrative view based on the coexistence of oppositions at the higher level leading to the development of hierarchical structure called ‘Seimei-Mandala’.

3.1.1. Human beings

We assume that human beings are open systems to environment. However, they are not statically open to environment but alternately open and close themselves against environment. We are interested in these circulation processes. By opening/closing the self,

human beings assimilate substances and energy from environment or the nonself. By opening the closed self, substances and energy in the self are dissimilated and emitted to environment. To close the self means seclusion, isolation, distrust, or carry-in. To open the self means interaction, call for assistance, trust in the nonself, or let-go. To close the self plays an important role in an open system where the self and the nonself circulate. Life processes of human beings can be explained by a dialectic world-view in which they accept reality as it is and seek solutions beyond confictions and one-sided perceptions.

A patient often discovers the meaning of his life by looking back on his experiences of disease/illness and anguish while swaying between life and death. In this way human beings always seek the meaning of their life and disease/illness provides them with an opportunity for their self-realization (Murase, T., 2011a, 2011b). Namely, since the repetitiveness of life history suggests that the anguish the patient currently experiences might have previously shown up in a different guise, he can be cared so that he can recognize the current experience positively and go through his life from now.

3.1.2. Environment

Since we have used the self and the nonself for patients and nurses instead of human beings and environment in the present theory, it is possible to change freely the position of the self as the subject. To an inpatient, health care professionals and other

inpatients are part of the nonself that greatly influences the self. Life and nature such as flowers, insects, animals and a change of the seasons are also part of the nonself. These are examples of “holding environment” in the sense of Kandabashi (1990). Since the influence of family as the nonself is so great, it is necessary to support family members of patients by understanding their difficulties, accepting their anxieties and informing them of social resources such as family associations.

The environment of wards and rooms is also part of the nonself. In psychiatric treatment closed wards and protection rooms are used for cares which shut out completely or incrementally increase the stimulus form environment in order to protect the self from threats of other inpatients. “Environment” in the present theory is anything surrounding patients so it should be essentially the same as that described by Nightingale (1859) although the conditions of environment then may be different from the current ones.

3.1.3. Health and Disease/Illness

We do not deny disease/illness and self-mutilation by regarding them as disintegration phenomena. We recognize that health and disease/illness are two sides of the same coin and we view them as meaningful phenomena. With this viewpoint patients and nurses can recognize that disintegration phenomena have their own meanings. If the patients swaying between the disintegrating self and the reorganizing self can recognize that such a state of mind has both positive and negative aspects, they can find rays of hope. Human beings repeating Self-Nonself Circulation, on the other hand, have always the risk of extinction/disintegration during the process in which the self assimilates the nonself.

3.1.4. Nursing

Nursing is an involvement as the nonself in the care for a patient who is in the process of Self-Nonself Circulation. Nursing is to help the patient give his life a meaning by recognizing that the current experience

of disease/illness is a repetition of the past experience in a different guise. According to Usui (1974) human beings by nature bear confictions and the confictions must be either resolved or harmonized. However, according to Self-Nonself Circulation Theory, we cannot resolve the confictions since one confiction gives rise to another. Therefore, our new theory proposes that nursing cares must be done in such a way that after confictions are recognized, the patients should not try to resolve them but admit them as they are and seek opposing but coexisting relations. This may be interpreted as a kind of “harmony”. We should also mention that in nursing cares there are two opposing but coexisting concepts: pro-care and con-care. In addition to these we meet conflicting expressions like “inherent ability within denial”, “parts and the whole”, and “discovery of meaning of life by living with illness”.

What all these mean is that nursing cares must be done on the premise of confrontational coexistence. Thus the role of nurses as the important nonself to the self who is suffering from disease/illness lies in helping him accept the fact that the experience of disease/illness itself has its own meaning by injecting into him the view that the current anguish is a necessary experience for the resurgence or reorganization of the self and is a repetition of the past one in a different guise.

When the energy of the patient reaches a lower limit and the self narrows down itself evading interactions with the nonself, nurses perform a pro-care in which they attend the self while agreeing with the cognition of the self. When the energy of the patient bubbles up and the self expands itself interacting with the nonself, nurses perform a con-care in which they attend the self while disagreeing with but prompting a change in the cognition of the self so that they can support a new way of life devised by the patient himself. Kato (2010) states that from the viewpoint of dynamics of life, creativity comes from the bipolar between elevation and depression, namely, what Aristotle calls melancholy.

Small but continued cares with which a patient feels comfortable may lead to the care that has a significantly positive impact on the whole existence of the patient. Some examples of such cares are physical cares such as an abdominal massage for constipation and bed bath, keeping a watch showing a deep interest, and natural conversations. Since the present theory is derived from Self-Nonself Circulation Theory, nurses themselves should change as the nonself during the process of nursing care for patients and should live in a circular way.

3.2. Main concepts in a new nursing theory

3.2.1. Self and Nonself

The 'self' is a closed system with a boundary by which the "endo-system" can be separated from the "exo-world". The 'nonself' is the outside of the 'self'.

3.2.2. Self-Nonself relationship as confrontational coexistence

This concept represents the endless confrontational coexistence of the self and the nonself. If confrontational relations between them, identified anywhere in the hierarchy of molecules (genes), cells, tissues, individuals, human relationships and social phenomena, can be integrated at higher levels, they are able to coexist.

3.2.3. The principle of Self-Nonself Circulation

This concept represents the fundamental principle of life with the effect that the self and the nonself circulate while maintaining their confrontational coexistence. The structure of this relationship is necessarily nested and hence eternally incomplete. A "Self-Nonself Circulation process" is the structural process following this fundamental principle of life. A "todokoori (delay)" of Self-Nonself Circulation process is a phenomenon primarily caused by deposition of substances that fail to be promptly degraded when reactions occur repeatedly somewhere in an organism for some reason and it leads to the onset of segmentations of the hierarchy in 'Seimei Mandala'

(Murase, M., 2001).

3.2.4. 'Seimei Mandala'

Mandala is a Sanskrit word meaning "circle". It is an inner image gradually formed within a mind by one's creativity when one needs to search alone a way out of one's lost mental balance. What we call "Seimei Mandala" (Figure 5) in our new theory is the symbol of the "principle of Self-Nonself Circulation Theory" with aspects of existence, evolution and cognition. We introduced this symbol in order to describe how simple principle generates complex structure as time proceeds.

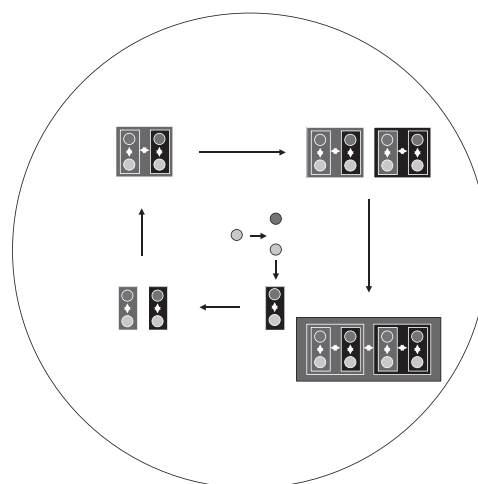


Fig.5. 'Seimei Mandala' (From Murase,M., 2001)

In Figure 5, an undivided unit, \bigcirc , placed at the center starts to split into opposing units, $\bigcirc \Leftrightarrow \bigcirc$, which in turn build up a higher unit as a synthesis of opposition, $\bigcirc \Leftrightarrow \bigcirc$, and the same process continues to build up the whole system. This is just like the circulation between the exo-world and the endo-system. The targeting whole system is the same as the beginning unit, though there is a difference in size and complexity. So, the Mandala shows historical processes of both division and synthesis. At the same time, the Mandala is also a picture representing special arrangements of different kinds of subsystems, in which there are intra-, inter- and trans-subsystems' conflicts. Each unit is indicated by a closed line. The Mandala therefore has a nested hierarchical structure,

as there are no edges like an open line. Note that we can obtain this Mandala by projecting the three-dimensional diagram (see Figure 4) onto the two-dimensional plane.

'Seimei Mandala' depicts the everlasting state of the unification and perpetual balance of the competing "spatial structure" and "temporal process". It is also an overhead view of the structure of life process which advances spirally in the direction of evolution unifying distortions at each level produced by confrontational coexistence (Figure 6). By a distortion of 'Seimei Mandala', we mean a segmentation of its hierarchy.

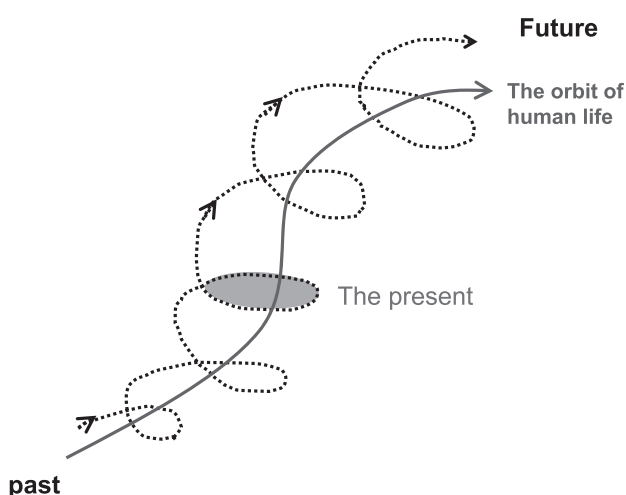


Fig.6. The structure of life process. (From Murase, T. 2006)

The characteristic feature of Self-Nonself Circulation Theory is that the principle of Self-Nonself Circulation determines the continuous complexification of new levels of organization in the hierarchy, resulting in diversity of life, namely, 'Seimei Mandala'.

3.2.5. Inherent ability within denial

This concept represents a care in which nurses trust the potential power of the patient hidden under his expressions. It includes such assistance that the latent survival and living abilities of the patient are not hampered and the self of the patient denied by himself is approved. It is related to the concepts such as "development and disintegration" and "confrontational coexistence" in Self-Nonself Circulation Theory. Since developing phenomena and disintegrating phenomena

are inextricably linked together in the present theory, the care must be done by trusting the inherent ability of the patient even though one is faced with negative phenomena. This concept is similar to that of resilience (Kato and Yagi, 2009)

3.2.5. Discovery of the meaning of life

This concept represents a care during which the life of a patient is reconsidered and it is related to the "historical nature of life" in Self-Nonself Circulation Theory. In this care nurses and the patient review the past life style leading to illness and the new life style devised by the patient himself. However, if embarrassing experiences of the patient in the past are exposed during the care, there is a risk of causing trauma by threatening the self. Thus it is important to create a better "holding environment" (Kandabashi, 1990) and, for instance, interrupt conversations when necessary by not missing subtle changes of words and actions of the patient.

3.2.5. Parts and the Whole

This concept represents a care with a view to understanding the self from its subtle expressions. It includes "cares grasping the entire picture by observing subtle countenances" and "continued physical cares". The relevant concept in Self-Nonself Circulation Theory is "parts and the whole". Since a human being is an indecomposable and holistic existence, parts are contained in the whole and vice versa. Examples of part-whole cares are cares acting on the self (the whole) through skin (parts) (Takei, 2004) and small physical cares that make patients feel comfortable (Kandabashi, 1990). It is because parts and the whole are organized into a nested hierarchy that nurses instinctively grasp the entire picture from the information of parts and can start cares from the instant they see patients.

3.2.5. Pro-care

This concept represents a care in which the nonself attends the self while agreeing with the cognition of

the self. It includes a care accepting and ignoring the anxiety, a care maintaining non-threatening environment, a care waiting for the energy bubbling up, a care making use of the past experience in life cycle. The relevant concept in Self-Nonself Circulation Theory is the endo-system and the exo-world. Since human beings are open systems to environment, the endo-system and the exo-world appear once patients close their selves. For exhausted patients who withdraw into their endo-systems by closing their selves nurses should not disturb their withdrawal but perform pro-cares gathering hints from subtle changes in their expressions.

3.2.5. Con-care

This concept represents a care in which the nonself attends the self while disagreeing with the cognition of the self. It includes a care with the suggestion of a different view promoting the development of cognition and a care with humor easing the depressed mood. The relevant concept in Self-Nonself Circulation Theory is confrontational coexistence. After creating a good “holding environment” (Kandabashi, 1990), nurses should urge a one-ideaed patient to think over by suggesting that a different view can be possible. Humor eases the cramped state of mind and the stability of symptoms can be measured by how much conversations with humor can be made (Kraus, 1971). A con-care is more like a “foreign substance” (Kandabashi, 1990) which is necessary as a perturbing stimulus to the equilibrium state. As the energy of the self is bubbling up, a nurse plays the role of the nonself providing the self with a different perspective and perturbs the present state by setting up confrontational coexistence within the cognition of the self.

4. Discussion

4.1. The nursing process using a new theory

- comparison with other theories –

Whereas human beings are intrinsically holistic

existence, the existing nursing theories aim to understand them by first decomposing them into systems and then organically integrating those systems. Surely, “decomposition and integration” is a circulating process of life, but there occurs a discrepancy as what is decomposed and integrated is not perfectly identical to the original (Kawahara, 1998). In our nursing theory based on Self-Nonself Circulation Theory, on the other hand, a view of the dynamic circulating process of the self and the nonself as a hierarchy enables us to understand human beings as holistic existence without decomposing them (Figure.7). Most of the existing nursing theories treat health and disease/illness as antipodal phenomena and define states of health as good, poor or sick. In our nursing theory derived from Self-Nonself Circulation Theory, on the other hand, health and disease/illness are explained by a difference driven by the same biological reaction mechanism of the Self-Nonself Circulation process. Hence it is considered that disease/illness lies in health and vice versa. Namely, the seemingly conflicting phenomenon of development and disintegration can be understood as two aspects of the same phenomenon driven by the Self-Nonself Circulation process so that seemingly conflicting phenomena such as “health and disease/illness” and “growth and aging” can be understood from the same viewpoint such as “disease/illness lies in health and vice versa” and “Aging lies in growth and vice versa”. It can also be said that the present theory is a nursing theory leading to a nursing care where a patient himself position properly the anguish caused by disease/illness in his life and finds the meaning of his life without separating the experience of disease/illness from the context of his life process.

Once a part of the hierarchy is distorted by a delay of the Self-Nonself Circulation process, this distortion propagates over ‘Seimei Mandala’ which is structured by the hierarchy and the whole ‘Seimei Mandala’ is distorted. As a consequence, “disease/illness” sets on and one feels physically and mentally sick. In this case, one identifies the contradiction causing the distortion

of 'Seimei-Mandala' and performs a nursing care toward the confrontational coexistence to accommodate the delay of the Self-Nonself Circulation process.

Newman's nursing theory (1994) based on the idea that health is a unification of illness and non-illness suggests that illness is contained in health and health is contained in illness. So Newman's theory has kinship with the present one. However, "expanding consciousness" in her theory, though it refers to the mutually inclusive relation between health and illness, is unidirectional. In her recent work "Transforming Presence" (Newman, 2008), she has reached the idea that hearty attendance with patients generates changes of both patients and nurses. Newman's theory and the present one differ in that the latter considers that consciousness of a patient does not proceed in an evolving direction of "expansion" only, but "disintegration" and "stagnation" have their own meaning in the patient's life for resurrecting the self.

Parse's nursing theory (1981), which interprets health as the process of living by one's own values, is similar to the present one in that it has theory development incorporating paradoxes in the three themes based on human becoming theory: meaning, rhythmicity and transcendence. However, it is hard to apply Parse's nursing theory to patients who have difficulty in verbalizing their anguish despite their will since the pattern cognition in human becoming is considered to be made through verbalization. The present theory differs from Parse's nursing theory in that the former also treats hard-to-verbalize unconsciousness as cognition.

Travelbee's nursing theory (1971) sheds light on experiences of illness and suffering and it is a theory about the necessity of nursing care which finds out meaning of such experiences. It positions the experience of illness and suffering in one man's life experience, rests on logotherapy, and explains that nurse's job is to assist the patient to find meaning of illness and suffering by himself. The anguish by illness threatening the current existence of the self, who is

obsessed with the past and unable to envision the future (Kraus, 1977), is often considered negatively since it sometimes entails self-destructive behaviors such as suicide and self-mutilation. Patients only look at the negative aspects and may commit suicide or self-mutilation in order to escape from the anguish. Nurses also only look at the negative aspects and may evade referring to the anguish. However, with the thinking that the anguish of illness and the self-destructive behaviors have their own meanings, the patient can find meaning of life in them. The idea that the experience of illness gives the opportunity to realize one's way of living is common in Travelbee's nursing theory and ours. However, Travelbee's nursing theory is not polished because of its excessive usage of terms and hence incomplete. In that sense the present theory may be regarded as a sophistication of Travelbee's nursing theory.

4.2. Significance of the application of Self-Nonself Circulation Theory to a new nursing theory

The quintessence of "Self-Nonself Circulation Theory" lies in its view that the developing and disintegrating processes of the self are inextricably linked together since there is always a risk of disorganization when the nonself in the exo-world is assimilated into the self in the endo-system during the process in which the self and the nonself circulate maintaining their confrontational coexistence. By constructing a nursing theory based on this theory one is able to recognize that "health and disease/illness", "normality and abnormality" or "life and death" are two sides of the same coin and think that there are meanings even in depressive behaviors which often trigger suicide and self-mutilation out of pessimism and remorse.

The very effort to find such meanings leads to the ability to counter depression or loss of hope. In our theory, nurses can show compassion for the patient sensing the deep cognition behind suicide and self-mutilation and support him now believing in the future existence of health, normality and life despite the

current captivity by disease/illness, abnormality and death. Persons likely to give rise to self-destructive behaviors, on the other hand, have energy for self-development and can exercise their creativity. This gives them the opportunity for transforming themselves.

In summary, the theory constructed in this work may be considered as a nursing theory which help patients discover the fact that there is another aspect in the experience of anguish caused by disease/illness, find meaning in that experience and position that experience in their life.

5. Conclusion

In this study we described how a new nursing theory could be derived from Self-Nonself Circulation Theory, and how the resulting new theory could be applied to nursing processes. As a result, we were able to develop a new nursing theory derived from a new paradigm of life. The characteristic features of the new nursing theory and its risks are as follows:

1. Trusting a patient's abilities lying at the depth of his consciousness is the basis of nursing care.
2. By reviewing a patient's life style with disease/illness enables him to seek a fresh meaning of his life.
3. Both mental and physical cares are necessary for nursing practice.
4. Not only a care agreeing with the cognition of the patient but also a care disagreeing with his cognition is very important.
5. We interpret two conflicting life processes like "developing process and disintegrating process" as actually being two sides of the same coin. With this interpretation, patients and nurses can find developmental meanings in disintegrating phenomena like disease/illness, self-mutilation and death by not responding negatively to them but looking at them beyond the surface. We have thus constructed a nursing theory which sheds light not only on the "self-developing process", but also

on the "self-disintegrating process" in the experience of illness and which prompts the reorganization or resurgence of the self. However, placing a significant emphasis on disintegrating phenomena carries a risk of their realization as suicide and self-mutilation.

6. We focus on the importance of closing the self in relation to the nonself. A nurse performs a con-care in which she attends the patient while confronting with his cognition once his energy bubbles up and the self opens itself interacting with the nonself. However, since a con-care, which shakes the patient, is of invasive character, it is associated with a risk of putting him mentally off balance. In other words, an untimely con-care may have an adverse effect. Thus it is necessary for a nurse to make an observation or interpretation of the patient with sensitivity, have a natural conversation with him during self-nonself fusion and care him with consideration, kindness, humor or anything that mitigates his suffering.
7. We focus on both physical and mental cares. A succession of little physical cares that make patients feel comfortable lead to parts-whole cares. According to Self-Nonself Circulation Theory, parts and the whole are organized into a nested hierarchy so that we can understand patients by thinking that the aspects of parts are contained in the aspect of the whole and vice versa. Thus cares in parts that have an influence on the whole are possible. However, there is a risk that even a small care leads to a holistic one. Thus it is necessary for nurses to carefully observe subtle expressions of the patient and give extra consideration not to stress confining themselves to such cares that make him feel comfortable.
8. As one focuses on the similarity/repetitiveness as the historical nature of life, it is necessary to explore meaning of the patient's life listening carefully to him as he talks about his experience. This enables the patient to find meaning of his experience of disease/illness his life. However,

there is a risk that as a nurse shakes the patient while extracting various associations from him by urging him to expand the contents of his talk, he may be put in a situation where he has to stand face to face with the self and may be traumatized by this threat to the self.

As countermeasures to the above mentioned risks, deliberate cares are needed in which nurses prepare "holding environment" (Kandabashi, 1990), have clear frameworks for cares and share information from the viewpoint of team work. As a nurse cares the patient in this way, her own view of nursing care develops spirally (See Figure 7). As time and aging advance, a nurse supported by those around her is spirally engaged in nursing practices based on her experiences and learning while she/he circulates between (internal) unconsciousness and (external) consciousness. The central orbit represents human relationships.

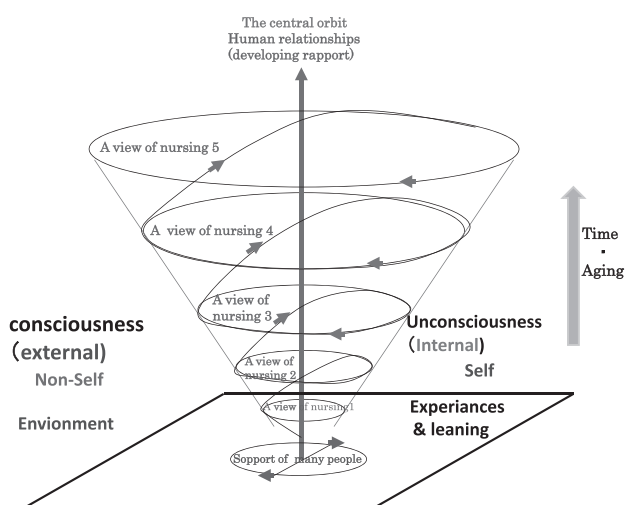


Fig.7. The structure of transition on a view of nursing
(From Murase, T. 2013)

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自己・非自己循環看護理論の構築

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要旨

本研究の目的は、「自己・非自己循環理論」に基づき、新しい看護の大理論を構築することである。構築する理論は、うつ病をもつ人に対する看護援助モデルを発展させ、さらに東洋哲学を基盤とした理論である。「自己・非自己循環理論」は、2000年に村瀬雅俊によって提唱された生命の歴史性という本質を捉えた統一生命理論である。この理論の特徴は、構造が創発されることによって、ヒエラルキーにおける新しいレベルでの継続的な複雑性が決定されるということである。この継続的な複雑性のシンボルは「生命マンダラ」である。

これまで提唱された看護理論のほとんどは、一般システム理論を基盤としている。これらの既存の看護理論は、2つのカテゴリーに大別される。第一は、適応理論、セルフケア理論、行動システム理論など、行動のある一側面から看護現象を捉えて構築された看護理論である。また、第二は、統一体として人間を捉えた理論や人間生成理論、意識の拡張理論など、人間を全体論的視点に立って捉えた理論である。現在まで、多くの看護理論が提唱されているにもかかわらず、ほとんどの理論では発展過程のみに焦点が当てられており、発展過程と崩壊過程の両者に焦点が当てられていない。

そこで、本研究では、「自己・非自己循環理論」に基づく新しい看護理論の構築過程について論述し、東洋哲学を基盤とした新しい観点に立つ新看護理論の構築を試みた。

